

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Office Action dated 29 December 2006. Responsive to the Office Action, Claims 1, 16, and 22 have been amended for clarification thereof. Claims 1-22 remain pending in the subject Patent Application.

In the Office Action, the Examiner objected to Claim 22 as being an improper form of dependant claim, specifically that Claim 22 is a system Claim, whereas Claim 1, from which Claim 22 depends, is a method claim. Accordingly Claim 22 has been amended to depend from independent system Claim 16.

The Examiner also rejected Claims 1, 15, 16, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara et al, U.S. Patent # 6,788,788, in view of Gelvin, U.S. Patent #7,020,701. The Examiner rejected Claims 2-4, 13-14, and 17-18 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, in view of Gelvin, and in view of Dinsmore et al., U.S. Patent #7,043,024. The Examiner rejected Claims 5 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, Gelvin, and Dinsmore in view of Kasahara et al, U.S. Patent #7,080,255). The Examiner rejected Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, Gelvin, and Dinsmore, in view of Briscoe, U.S. Pub. #2003/0044017. The Examiner rejected Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, Gelvin, and Dinsmore, in view of Akiyama, U.S. Pub. #2003/0002680. The Examiner rejected Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, Gelvin, Dinsmore, and

Kasahara '255 in view of Hardjono, U.S. Patent #6,584,566. Lastly, the Examiner rejected Claims 9-12 and 20-21 under 35 U.S.C. § 103(a) as being unpatentable over Kasahara '788, Gelvin, Dinsmore, and Kasahara '255 in view of Perlman, U.S. Patent #5,455,865.

It is respectfully submitted that neither the Kasahara '788 reference, nor Gelvin provide such features: forming a key ring for each sensor node including a plurality of individually selectable keys randomly chosen from a common pool, wherein the key rings of at least a pair of sensor nodes will have a common key, as defined by newly amended independent Claims 1 and 16. Further, it is not believed that Kasahara '788, or Gelvin effect any steps to discover sensor node pairs having a key in common.

It is believed that Kasahara '788 could not use a key ring of individually selectable keys randomly chosen from a common pool inasmuch as Kasahara '788 uses "entity specific keys." Kasahara '788 and the underlying ID-Niks key system employed therein generate "entity specific keys" as a function of the unique identity (ID) information of each entity. As such, randomly drawing keys from a common pool is at odds with the Kasahara '788 approach.

Further, as the ID-Niks system of Kasahara '788 uses entity specific keys, no two entities will share a common key. Therefore, discovering another entity with a common key is necessarily precluded by the Kasahara '788 reference, and by an ID-Niks system for that matter. This is bolstered by the fact that since each entity generates specific keys dynamically to communicate with other entities, each entity can communicate with every

other entity.

Still further, Kasahara '788 discloses each entity using all of its entity specific secret keys to communicate with the other entity. Therefore, as all of the entity specific keys are used, the individual keys are not individually selectable as in the subject Patent Application.

Lastly, the Gelvin device expressly teaches away from the use of symmetric keys, and instead discusses only asymmetric encryption utilizing public keys. (Gelvin Column 39; Line 13). With an asymmetric encryption technique, the keys of the two communicating entities will not be equal. Thus it is not believed that one would be motivated to look to Kasahara '788 for encryption as the Kasahara '788 uses a dissimilar and non compatible ID-Niks key system.

As the combination of Kasahara '788 and Gelvin fails to suggest such a combination of elements, and in fact teaches away from this combination, they are not believed to be able to make the instant invention obvious.

Dependent Claims 2-15, and 17-22 are believed to show further patentable distinctions, but are believed allowable for at least the reasons presented supra.

It is therefore now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

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Application Serial No.10/666,207

Responsive to Office Action dated 29 December 2006

If there are any fees necessary in this filing, the Director of Patents and Trademarks is hereby authorized to charge deposit account # 18-2011 for such additional charges.

Respectfully submitted,
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